**Below some of Advanced SQL Functions can be used for Data Analysis**

1. **Pivot tables**

When you write a regular query, you get data output in columns and rows format. Pivot tables can be used to transform rows into columns, summarizes the data in a tabular format.

Select Department,

Sum(CASE When month(Date\_of\_sale) = ‘Jan’ Then Total\_sales ELSE 0 END) As Jan,

Sum(CASE When month(Date\_of\_sale) = ‘Feb’ Then Total\_sales ELSE 0 END) As Feb,

Sum(CASE When month(Date\_of\_sale) = ‘Mar’ Then Total\_sales ELSE 0 END) As Mar,

Sum(CASE When month(Date\_of\_sale) = ‘Apr’ Then Total\_sales ELSE 0 END) As Apr

From Dpt\_wise\_dales

Group by Department

The output looks like below, providing the Department wise sales for the months – Jan to April

Department | Jan | Feb | Mar | Apr

0000000100| 200 | 300 | 400 | 100

0000000200| 100 | 200 | 300 | 400

0000000300| 300 | 100 | 200 | 200

0000000500| 500 | 200 | 900 | 400